MOBILITY AND THE SDGs
A safe, affordable, accessible and sustainable transport system for all

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The goal of this paper is to raise awareness and get to know the Sustainable Development Goals (SDGs) and their relevance to public transport. It also aims at advocating that subnational perspectives are integrated into national SDG strategies and recommends the monitoring and reporting of the SDGs are done by local actors for the implementation of the SDGs.

Over the past few years, development policy has experienced a significant advance towards a truly global consensus. In a few months through 2015 and 2016, the international community — within the institutional framework of the United Nations — agreed upon and adopted several core documents for the definition of a common agenda to shape the world we live in up to 2030. The Paris climate agreements collected an unprecedented number of signatures on a first-ever binding climate agreement to maintain the global temperature rise well below 2 degrees Celsius relative to pre-industrial levels. The Addis Ababa Action Agenda defined a new global framework for financing sustainable development by aligning all financing flows and policies with economic, social and environmental priorities. The Sendai Framework for Disaster Risk Reduction recognized the need to engage local governments and social stakeholders and civil society in the definition of safer, more resilient and inclusive societies. Sustainable mobility and transport are the connective tissue, the fabric that permeates this new idea of society, and fundamental goals at the heart of this global strategy.

All these items revolve around the 2030 Agenda, which established an ambitious collection of 17 Sustainable Development Goals (SDGs), detailed in 169 Targets, covering the whole spectrum of human development — from the fight against poverty, to climate change, education and health, gender equality and decent work, to better institutions, justice and peace, and sustainable and liveable cities and territories. Mobility and transport, in particular, are crucial to the achievement of sustainable cities and communities and embedded in a dedicated Goal, SDG 11, even though many other 2030 Agenda goals and targets refer, however indirectly, to the need for more sustainable, accessible, inclusive and efficient urban and territorial transportation. Finally, at the Habitat III summit in 2016, UN member states agreed on the New Urban Agenda (NUA), translating part of this comprehensive commitment to the specific challenges
and needs of the cities of today and of the future. Paragraphs 50, 54, 113, 114 and 116 of the NUA, in particular, emphasize the centrality of sustainable and accessible mobility and transport in a urban society that builds around innovative and inclusive planning, territorial integration and safe, accessible public spaces. The process that led to the adoption of the SDGs and the other global agendas is structurally intergovernmental. This notwithstanding, their goals and their underlying principle of ‘leaving no one behind’ cannot be ultimately fulfilled unless local governments, communities, and territories are fully engaged at all stages of the implementation process. Accordingly, the constituency of local and regional government and their global networks — such as United Cities and Local Governments (UCLG), Metropolis, C40 and the other members of the Global Taskforce of Local and Regional Governments (GTF) — have mobilized synergically to push an agenda of ‘localization’ of the SDGs and the other global agreements.

Localization is a strategic attempt to go beyond mere implementation at the local level (as if the Goals were simply trickling down from the top down) and rather include the local dimension and perspective in all phases of the policy-making process: from the definition of priorities, to the adaptation of plans and strategies, from the search for adequate resources and locally co-owned means of implementation and the definition of local indicators for effective monitoring, to the exchange of information and expertise among peers invested in the same quest for a truly local approach to global development. This perspective is all the more relevant in mobility and transport, which serve as the basic infrastructure of urban and territorial life.

Inherently linked to the urban and territorial dimension, SDG 11 on sustainable cities and communities has been the lynchpin of the localizing process. Its inclusion in the 2030 Agenda is the result of the advocacy work of an active urban and territorial constituency, spearheaded by UCLG and the International Association of Public Transport (UITP). It is because of this work that a specific target such as SDG 11.2 can now aim, by 2030, to provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.
Linking SDG 11.2 with a multiplicity of urban dimensions and several associated targets under other Goals will allow mobility to make a significant contribution to the whole 2030 Agenda. Universality and indivisibility are ultimately at the core of localization, and make it essential for the full achievement of the agendas. Within the ‘global’ framework of the SDGs, SDG 11.2 relates more directly to the responsibility of regional, local and public transport community: while this is well established for the delivery of basic services, localization also calls them to monitor and report on the fulfillment of these global goals and advocate for the expansion of public, affordable and accessible transport. Inevitably, local and regional governments (LRGs) and public transport undertakings must be at the heart of SDG 11.2. This cannot be separated from effective awareness-raising to increase citizen engagement, as well as from the initiatives of local stakeholders and the acknowledgement of their vital role in achieving the SDGs. Ultimately, that will be the benefit of future generations and ensure that no one is left behind.

Cities play a critical role in several aspects of effective and sustainable mobility. These range from the provision of safe, affordable, accessible and sustainable transport systems for all to improving and guaranteeing road safety. Lack of access to transportation, especially in peripheral urban areas in developed countries and marginalized neighbourhoods in developing ones, frequently aggravates economic and social isolation and segregation. However, with sufficient support, cities can promote inclusive and integrated urban planning and transport policies and transform their transport systems. Public transport is central to these policies, enhancing access for all and giving particular attention to the rights of women, youth, people with disabilities, older persons and other vulnerable groups.

Efficient mobility systems reduce congestion, accidents, noise, pollution and greenhouse gas (GHG) emissions thanks to transit avoided carbon, at the same time facilitating access to education, jobs, markets and a range of other essential services to ensure that ‘no one is left behind’. Accordingly, it can be argued that at least seven SDGs are linked to mobility, either explicitly through transport-related targets, or via cross cutting dimensions of sustainable transport in urban and territorial policies.

2.1. Trends in expanding public transport

The Global Mobility Report finds that SDG 11.2 is still far away from being met. From 2001-2014, a combination of higher transit use and rapid growth in urban populations led to a 20% rise in demand for public transport.⁴

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2. Global progress in reducing GHG emissions (SDG 13), for example, can also be achieved via SDG 11.2: A high shift scenario to public transport, walking and cycling would eliminate about 1.7 gigatons of carbon dioxide (CO₂) annually — a 40% reduction of urban passenger transport emissions.
3. The report is produced by the Sustainable Mobility for All (SuM4All) initiative, a worldwide consortium of over 50 leading organizations in the transport sector. It assesses progress on sustainable mobility around the world. The document is available at: https://openknowledge.worldbank.org/bitstream/handle/10986/28542/120500.pdf?sequence=5
4. 38 countries were scrutinized.
Based on research by UITP, available at this address: http://www.uitp.org/MCD.

See online at this address: http://www.uitp.org/strategypublic-transport.

Worldwide daily trips via public transport account for approximately 16% of urban movement, while walking and cycling provide about 37%, and private motorized transportation still leads with about a global average 47% – about three times the share of public transport. By 2030, the target date for the SDGs, it is estimated that the number of daily public transport trips could increase by 50%, reflecting both the projected growth in urban population and an increase in the number of trips made daily by each urban resident.5

This increase would primarily be in developing economies, where approximately 90% of global population growth will occur in the coming decades. Cities in developing countries are in fact already struggling to meet increasing demand for public transport, with insufficient investment to finance this growing need.

Figure 2 shows that a business-as-usual scenario consistent with 20th century trends would imply a change in urban transport patterns and a significant shift from walking and cycling to private motorized vehicles. Public transport would see only a small increase of its market share, while the number of trips on private motorized vehicles would grow by almost 80%, making SDG 11.2 unattainable.

Alternatively, doubling the share of public transport usage worldwide, and keeping walking and cycling stable, would make it possible to decouple urban mobility growth from growth in its societal and environmental costs — the UITP PTx2 scenario.6

The modal split resulting from the PTx2 scenario would be more balanced, with urban trips being shared almost evenly between public transport, walking and cycling, and private motorized vehicles. The premise is not to reduce the
number of trips made by private vehicles but rather to keep those at current levels (about 3.5 billion trips per day) and to ensure all extra mobility would be provided by sustainable modes of transport. In doing so, this would allow us to meet the continuously increasing demand for urban transport while decreasing per capita urban transport emissions by 25% (on a global average).

For these scenarios to be viable, decision making will need to consider the inherent heterogeneity of transport and mobility in different contexts. Consistency between LRGs’ competences, powers, regulation and licensing, and the inevitably diverse methods of funding of such services, will be essential for SDG 11.2 and several other targets of the 2030 Agenda, the National Urban Agenda, and the Paris Climate Agreement to be met. Funding methods include user tariffs, subsidies or co-funding via national, regional or local government or cross-subsidies.

As an example, the rapid growth of cities in Africa has created a highly fragmented public transport system with generally weak public infrastructure. Most commuters have still to walk long distances to access public transport and often on unsafe, inadequate roads. Those commuters who can pay for public transport rely heavily on buses, midi/minibuses, taxis and motorcycles, and other means of informal transportation. These are, as their informal nature suggests, unregulated or partially regulated and often operate without fixed routes, stops and timetables. The presence of these informal systems in almost all cities in the Global South is a manifestation of the fact that the formal systems supplied by city governments is unable to meet the rapidly rising transport needs of growing city populations. Rail commuting services are generally only available in a few major African cities.

Informal and formal transit are in constant competition, often leading to massive congestion and serious safety and pollution issues. Informal transportation has also had a huge impact on urban transit in Latin America and Asia. Furthermore, in Africa, up to 80% of public transport users rely on informal transport. Against this backdrop, SDG 11.2 should account and clearly distinguish both informal and formal provision of public transportation, thus highlighting the urgency of calibrating the global agendas with the actual demands and resources of LRGs on the ground.

2.2. Policy responses to expanding public transport

The UN Secretary General’s High-Level Advisory Group on Sustainable Transport has recommended progress in three key areas to guarantee sustainable, accessible and inclusive transport: policy development and implementation;
financing; and technological innovation. Local governments have tremendous potential to contribute to this, given how many transport sector policy instruments are within their jurisdiction. These include road safety, cycle and walking paths, density promotion, bus rapid transit schemes, traffic-free zones, ‘car-free days’, congestion-pricing schemes, and shared-mobility platforms to reduce reliance on private transport and address urban pollution, alongside ‘nationwide’ measures such as fuel taxes and enhanced rail infrastructure.

In many cases, Sustainable Urban Mobility Plans (SUMPs) have provided local authorities with a clear framework for implementation of sustainable urban transport systems. Brazil has made urban mobility plans a legal obligation for 3,300 cities and a precondition for receiving transport infrastructure financing; and the Ministry of Cities has provided technical and financial assistance to many cities developing their own urban mobility plans. Copenhagen’s ‘long-term vision’, for example, ‘is that at least one third of all driven traffic in the city should be made by bicycle, at least one third by public transport, and no more than one third by car’. In Dubai, the Roads and Transport Authority is aiming for 20% of total trips to be by public transport by 2020 and 30% by 2030 – thus doubling the share of 15% in 2015. In terms of national efforts to pursue this goal, Malaysia, for example, has set a nationwide goal to achieve a public transport target of 40% of all trips in urban areas by 2030. SUMPs can also play a significant role in addressing road safety, which is at the core of SDG 3.6 which seeks to reduce road traffic deaths by half by 2020. Already, 1.2 million people die and up to 50 million injured in traffic accidents annually. Nearly half of these incidents occur in urban areas. SDG 11.2 specifically recognizes the importance of having access to a safe and sustainable transport system based on a backbone of public transport, which in turn will help improve road safety. Travelling by public transport is ten times safer per mile than travelling by car; and as such by having and using more public transport, it will make a significant contribution to road safety targets.

It is estimated that roughly US$2-3 trillion per year will be required between 2015-2030 to fill the sustainable financing gap. Infrastructure related sustainable urban development is estimated to account for between two-thirds and three-quarters of all infrastructure investment to 2030. Yet governance and market failures are driving a financial gap of roughly 50%. Investing in sustainable urban infrastructure, like public transport, does not have to be more expensive. In fact, making cities more compact and connected based on a public transport backbone will lower investment requirements by 10%.

On the other hand, public transport operation and capital investment costs have also grown significantly in the last decade due to increased demand, higher quality expectations from customers, and the growing cost of production (chiefly labour and energy). LRGs usually fund most of the gap between commercial revenue and operating costs. In developed economies, this represents on average of about 50% of public transport operating costs. There is no ideal
specific ratio of financial support to fare revenue, but successful approaches combine the development of a proper revenue strategy, the earmarking of local charges for public transport and partnerships with private investors. In addition, new technologies may need new financing models. For instance, considering the high entry barrier to electric bus systems, new business and financing models are needed to help cities and operators to invest in these cost-effective low-emission alternatives. This includes models such as joint procurement between transit agencies to bring down the upfront costs, and also leasing models separating the battery from the bus.

Finally, technological improvement and developments in transport and mobility have affected policy through sustainable and low/zero-emission vehicles and systems, geo-localized services, usage flow and itinerary tracking, or travel and road behaviour sensorization. Innovation has increased accessibility, affordability, service rationalization, and safety (of both users and other citizens). Global cooperation frameworks among cities have also helped significantly in this regard. For example, the UCLG and UITP Mobility Champions community is the first global platform of city leaders taking concrete action to collaborate in leading the transition in urban mobility. It builds on the capacity and hands-on experience of UCLG and UITP Members, galvanized in the UCLG Community of Practice on Mobility and UITP Committees, respectively, to strengthen global advocacy for sustainable mobility. It is a common agreement between Mayors, Ministers and other public sector leaders, together with private stakeholders, to share their insights and good practices on creating and implementing ambitious urban mobility projects. In addition, the UITP Sustainable Development Committee has developed an international standard for the sector on sustainability reporting linked to the SDGs which is helping to integrate the goals into company strategies, enhance SDG performance, monitoring and reporting as well as the sharing of best practice and awareness raising within the sector and wider communities. Sustainable mobility has been an area in which metropolitan cities are most likely to exchange best practices and expertise with each other and the above working bodies are ideally suited to take forward such an approach which is fundamental to SDG 11.2 implementation. By supporting the promotion of local level actors in delivering the 2030 Agenda and bringing these stories of action to the attention of the international community and decision makers, both UITP and UCLG can help the call for an enabling environment for the localization of the SDGs.

Ultimately, while some data does exist internationally there is a need to build the capacity of countries and cities to improve the availability of data. Indicator inadequacy remains among the biggest barriers to monitoring the achievement of SDG 11.2 as few local and national statistical agencies are collecting information on the ‘official’ indicator, i.e. ‘the proportion of the population that has convenient access to public transport.’ Proxy indicators, easily aggregated and regularly reported by public transport authorities and operators at the local level (e.g. passenger journeys, mode share, vehicle-km of public transport vehicles, length of public transport lines or the number of public transport stops per area) could complement the measurement of SDG 11.2 implementation, especially for cities.
with low data collection capability. As already mentioned, UITP has developed a common data reporting framework for the public transport sector to track operational performance data on the SDGs to support LRG, national reporting and policy development. This will help create a harmonized data set on measuring expanding public transport (both infrastructure and use) which can feed into local and national reporting frameworks. Capacity development to report such information will be critical which UCLG and UITP are in an ideal position to support, which will eventually help address the global data gap. Looking ahead, digital tools will help to better measure progress on the SDGs as well as bridge the formal-informal public transport divide. For example, by using an open digital platform it has allowed Cape Town to become the world’s first city to map both the formal and informally run public transport services and make data openly available.

**3. The way forward**

SDG 11.2 and sustainable mobility and transport are not attainable unless more integrated approaches, urban policies and public transport systems, enhanced governance frameworks, short and long-term planning, capacity-building, and engagement of all stakeholders are systematically put in place. Decentralized frameworks, coordination between transport and territorial planning institutions, clear and accountable contractual relationship between local governments and service provider, mixed and localized financing instruments are critical levers.

Urban policies and public transport systems must be developed in an integrated way in order to achieve maximum impact. Such integration needs to happen on two levels. At the policy level, joint policy design is essential to deliver a consistent urban mobility system, with urban planning and transport decision-making integrated so as to build more compact cities and favour mixed land use, as a way to increase accessibility. On a practical level, improved coordination among different transport modes will create more appealing, efficient and user-friendly transit systems, and positively spill over in terms of shaping better user behaviour, and favouring sustainable, collective and public transit over polluting or inefficient private options. All this can only happen under a comprehensive and well-defined urban mobility strategy — inevitably supported by visionary leadership, technical awareness and the strong backing of political will across all levels of governance and institutional design.

Existing urban public transport services, moreover, need sufficient funding just to maintain current service levels and quality: large-scale investments will be required in the future to upgrade and modernize existing infrastructure and fund new projects, notably in fast-growing cities. In many places around the world, public spending has shrunk, threatening public transport funding: to help ensure dependable and sufficient funding for public transport, new funding avenues also need to be explored. These include congestion and road pricing, parking and similar charges as part of a diversified toolbox, complemented by innovative sources, e.g. land-value capture programmes, green bonds and transit oriented development (TOD) grants, fuel/carbon taxes and other climate-compatible financial instruments.
Service and technology innovation is key to offering customers a top-quality mobility option and an enhanced journey experience that can help to reduce accidents, improve access and the environment. Ultimately, the capacity of the sector needs to grow if it wants to respond to the ever-growing needs of urban citizens. Going ahead, both UCLG and UITP will support the building of capacity and the tracking of future performance on SDG 11.2, both globally and regionally, in order to provide critical input and support local, regional and national governments, as well as UN-Habitat.30

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Recommendations

> Scale up localizing the SDGs as a key part of national strategies and implementation: Effective localization requires local and regional governments as well as the public transport sector to integrate the SDGs into their objectives so that they can be well coordinated into their national strategies and reporting frameworks.

> Strengthen institutional relationships between cities and public transport sector for SDG 11.2 implementation: Coordinating local, regional as well as government and financial responsibilities aligned to the SDGs will be critical to achieving SDG 11.2. National governments made a commitment to the 2030 Agenda, so regulatory frameworks and institutional incentives should enable local level action to enhance and expand public transport.

> Support initiatives to enhance city reporting on the SDGs, notably SDG 11.2 implementation using public transport data: A bottom-up approach to monitoring performance based on information typically collected by the public transport sector is essential to the objective of providing access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport. Public transport proxy data should feed into local and national statistical organizations to ensure the effective monitoring and reporting of SDG 11.2.

> Development of National Urban Mobility Policies (NUMP) to support local level implementation and sustainable development: NUMPs can contribute to a more collaborative framework to support vertical policy making and implementation. This partnership approach to delivery can ensure the empowering of the local level for SDG 11.2 delivery.

> Promote international cooperation and efforts on SDG implementation: International organizations such as UCLG and UITP are perfectly placed to strengthen the means of implementation to revitalize the global partnership for sustainable development as enshrined in SDG 17. Strengthening such arrangements should be enabled by the UN system, notably in support of monitoring and capacity development on SDG 11.2.